

NIKANOROV, A.S.; MIKHAYLOV, I.I.

Formation textures of macrocrystalline mica-bearing muscovites in
pegmatites. Zap. Vses. min. ob-va 93 no.3:273-280 '64.
(MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut
(VSEGEI), Leningrad.

NIKANOROV, A.S.

Relations between biotite and muscovite in mica-bearing pegmatites.
Trudy VSEGEI 108:69-85 '64.
(MIRA 18:2)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8

BABOSHIN, V.A.; BOROVIKOV, P.P.; ZAKHARCHENKO, A.I.; IVANOV, A.A.; NIKANOROV,
A.S.; NIKITIN, V.D.; RYTSK, Yu.Ye.; SMIRNOVA, V.S.; SOKOLOV, Ya.N.;
SOLOV'YEV, A.T.; TSEKHOMSKIY, A.M.

In memory of Daniil Timofeevich Misharev. Trudy VSEGEI 108:189-191
(MIRA 18:2)
'64.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8"

NIKANOROV, A.S.; MIKHAYLOV, I.I.

Temperatures of the formation of pegmatoid structures in mica-bearing and ceramic pegmatites. Geokhimiia no.11:1146-1151 N '64. (MIRA 18:8)

1. All-Union Scientific Research Institute of Geology, Leningrad.

NIKANOROV, B.A., aspirant

Role of the agent of avian tuberculosis in the epizootiology of
tuberculosis in cattle. Veterinaria 38 no.6:32-35 Je '61.
(MIRA 16:6)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.
(Tuberculosis in animals)

5

NIKANOROV, B.A.

Proteins and the morphology of the blood of cattle inoculated
with the pathogen of tuberculosis of the fowl type. Trudy VIEV
26:102-106 '62.
(MIRA 16:2)

1. Laboratoriya po izucheniyu tuberkuleza i paratuberkuleza
Vsesoyuznogo instituta eksperimental'noy veterinarii.
(Tuberculosis in cattle) (Blood proteins)

NIKANOROV, Nikolay kand. vater. nauk

Prophylaxis of pullorum disease. Veterinarija Li no.6:51-53
Je '64. (MIRA 18:6)

1. Moldavskiy nauchno-issledovatel'skiy institut zhivotnovodstva
i veterinarii.

NIKANOROV, F.I.

Raise the technological level of White Russia's canning and dehydrated vegetables industry. Kons. i ov. prom. 13 no.2:4-6 F '58.

(MIRA 11:2)

1. Belorusskiy nauchno-issledovatel'skiy institut pishchevoy promyshlennosti.

(White Russia--Food industry)

NIKANOROV, F.I.

Specialized vegetable growing in the areas of White Russia
canneries. Kons. i ov. prom. 13 no.11:35-37 N '58. (MIRA 11:11)

1. Belorusskiy nauchno-issledovatel'skiy institut pishchevoy
promyshlennosti.
(White Russia--Vegetable gardening)

NIKANOROV, Ivan Mitrofanovich; PASHKEVICH, Bogdan Vikent'yevich;
KOROLENKO, I.K., red.; MANINA, L., red.izd-va; VOLOKHANOVICH,
I., tekhn.red.

[Problems of stimulating production and new technology] Voprosy
stimulirovaniia proizvodstva i novoi tekhniki. Minsk, Izd-vo
Akad.nauk BSSR, 1960. 91 p.
(MIRA 13:6)
(White Russia--Industries)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8

NIKANOROV, K.D., podpolkovnik

Airport kept in constant combat readiness. Vest. protivovozd. cbor.
no.1:36-38 Ja '61. (MIA 14:2)
(Air bases)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8"

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8

NIKANOROV, K. V.

The Chemistry and Application of Organophorous Compounds. Vest. A. N. SSSR, v. 26, No 2, 1954, p. 55-57.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8"

NIKANOROV, L.L.

Practices of the "Druzhnaya Gorka" Plant. Stek. 1 ker. 17
no.10:40 '60.
(Kozelsk--Glass manufacture) (MIRA 13;10)

SEMELEV, A.I.; NIKANOROV, L.L.

Glass furnace without a working end. Stek. i ker. 20 no.4:30-31
Ap '63. (MIRA 16:3)

1. Berezhichskiy stekol'nyy zavod.
(Glass furnaces)

L 57512-65 ENG(j)/EWT(m)/EWP(w)/EPP(c)/EWA(d)/EPR/T/EWP(t)/EWP(z)/EWP(b)/EWA(c)
Pr-4/Pa-4 IJP(c) M.W/JD

ACCESSION NR: AP5013152

UR/0129/65/000/005/0015/0021
669.295'71'26'28:620.17:669.787'788

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44
G

AUTHOR: Nikanorov, M. A.; Dykova, G. P.

TITLE: The effect of oxygen and hydrogen on the mechanical properties of VT1, OT4 and VT15 alloys

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 5, 1965, 15-21

TOPIC TAGS: titanium alloy, metal mechanical property, nonferrous metal alloy

ABSTRACT: The effects of O and H impurities on the mechanical properties of Ti alloys in the as-processed and aged conditions were studied. The materials were heavily alloyed except for VT1; OT4 (Al--3.5%, Mn--1.4%) and VT15 (Al--3%, Mo--7.6%, Cr--10%). Mechanical properties were correlated with microstructures.¹⁶ The mechanical tests indicated that increasing the O content to 0.4% increases strength and reduces elongation, R. A., and impact toughness. The comparative effects of O and H were found to be different, H having a much weaker effect. Also, the effects of aging VT1 was studied. Microstructures indicated distinct differences, and the influence of O on hydride quantity and distribution was specifically mentioned. The

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I 57512-65

ACCESSION NR: AP5013152

possibility of O affecting the diffusivity of H was not discounted. Aging studies made on VT15 at 300 and 580°C were reported. In general, the effect was one of strengthening, and electron micrographs of selective samples confirmed the decomposition of the β -solid solution into α -phase. The influence of H was slight in changing the properties of the alloy on aging. Orig. art. has: 7 figures, 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, AS

NO REF Sov: 000

OTHER: 000

2000
Card 27

ACC NR: AP7005133

SOURCE CODE: UR/0126/66/022/004/0591/0597

AUTHOR: Lerinman, R. M.; Khvostyntsev, K. I.; Nikanorov, M. A.; Anitov, I. S.;
Ksenofontova, T. B.

ORG: Institute of Metal Physics, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Combined effect of plastic deformation and aging on the structure and properties of
TS6 titanium alloy

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 4, 1966, 591-597

TOPIC TAGS: titanium alloy, metal aging, plastic deformation, phase composition, metal
recrystallization / TS6 titanium alloy

ABSTRACT: The effect of plastic deformation (rolling with degrees of deformation amounting
to 3, 10 and 40% and aging(at 480°C for 2, 10, 30 and 100 hr) on the fine structure (the kinetics
of decomposition of the β -phase, dispersity and the distribution of the α -phase) of TS6 titanium
alloy (3.22% Al, 3.42% Mo, 7.80% V, 10.80% Cr, 0.18% Fe, 0.03% C, 0.01% Si, 0.07% O₂,
0.01% N₂, with Ti as the remainder) was investigated by means regular and electron
microscopy and measurements of hardness and tensile strength. It is shown that plastic de-
formation accelerates the decomposition of the metastable β -phase and results in a more fine-

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UDC: 548.526

ACC NR: AP7005133

-grained and uniform structure devoid of undecomposed boundary-layer and intragranular residues of the β -phase, which, together with the high degree of dispersity of the particles of the segregating α -phase, leads to a general improvement in mechanical properties. Quenching the alloy from 800°C following 3% deformation results in polygonization; following 10% deformation, in partial recrystallization; and following 40% deformation, in total recrystallization of the structure. In this last case, since the decomposition of the recrystallized β -phase occurs slowly, a marked change in the alloy's hardness is observed only after 100 hr of aging at 480°C. This may be a cause of the heterogeneity of the alloy's properties following its hardening by heat treatment. The highest hardening rates were observed for the specimens subjected to 3 and 10% deformation prior to their quenching, which indicates that an incompletely recrystallized structure is favorable to the increase in mechanical strength following aging. Orig. art. has: 7 figures, 3 tables.

SUB CODE: 420/ SUBM DATE: 05Feb66/ ORIG REF: 001/ OTH REF: 001

Card 2/2

NIKANOROV, M. V., Engineer

Cand. Tech. Sci.

Dissertation: "Investigation of main factors effecting the length of
lowering-lifting operations in drilling." 14 Jun 49

Moscow Order of the Labor Red Banner Petroleum Inst. imeni

SO Vecheryaya Moskva
Sum 71

Academician I. M. Gubkin

NIKANOROV, M.M.; IGNATIADI, A.I.

Relationship between the size of mineral particles in sandstone
and their abrasive properties. Izv. vys. ucheb. zav.; neft'
i gaz 3 no.5:51-56 '60. (MIRA 15:6)

1. Groznenskiy neftyanoy institut.
(Oil well drilling)

4027 NIKANOROV, N. A.

Issledovaniye ekonomicheskoy effektivnosti kompleksnogo ispol'zovaniya
syr'ya v zesopilenic. L., 1954. 16 s. 20 sm. (Leningr. ordena
Lenina lesotekhn. akad. im. S. M. Kirova). 100 ekz. bespl. (54-56592)

SOLOV'YEVA, N.A.; NIKANOROV, N.G.

Find of alkali pyroclastic rocks in the Vilyuy River Basin.
Trudy VAGT no.7:130-132 '61. (MIRA 14:7)
(Vilyuy Valley--Rocks, Igneous)

NIKANOROV, N.G.

Interpretation of aerial photographs in prospecting for kimberlite
pipes. Trudy VAGT no.8:144-150 '62. (MIRA 15:11)
(Yakutia—Kimberlite) (Aerial photogrammetry)

NIKANOROV, N.V.

Using sectional turbodrills at pressures of 180-200 atmospheres.
Neft. khoz. 38 no.3:11-13 Mr '60. (MIRA 13:7)
(Oil well drilling) (Turbodrills)

NIKANOROV, N.V.; YADULLAYEV, N.N.; MAMED-ZADE, E.B.; BAGIROV, R.Ye.;
ABASOV, E.A.

Unstable performance of turbodrills under great axial loads.
Azerb. neft. khoz. 41 no.6:12-15 Je '62. (MIRA 16:1)
(Turbodrills)

NIKANOROV, N.Ye., elektroncher (Cor'kiy)

Testing of the sealing of a gas relay. Energetika. 13 no. 732
'65. (MCH 298)

24.7100, 24.7500

77003
SOV/56-37-6-43/55

AUTHORS: Nikanorov, S. P., Stepanov, A. V.

TITLE: Letter to the Editor. Thermal Relationship in Elastic Constants of Potassium Bromide Monocrystals

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 6, pp 1814-1815 (USSR)

ABSTRACT: Measurements were made of the Young's modulus E and the shear modulus G in KBr crystals cut out along the directions $\langle 100 \rangle$ and $\langle 110 \rangle$. The method was based on complex oscillation, which was described in detail in the first part of this study (cf., A. V. Stepanov, I. M. Eydus, Zhur. Eksp. i Teoret. Fiz., 29, 669, 1955). The resonance frequency was measured with the aid of a heterodyne wavemeter (type 528; precision $\pm 0.025\%$). The relative error in measuring the elastic constants $s_{11} = 1/E_{(100)}$; $s_{11} = 1/E_{(110)}$; $s_{44} = 1/G_{(100)}$, was 1.2, 1.2, and 0.8%, respectively. The obtained results are summarized in the table below:

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Letter to the Editor. Thermal Relationship
in Elastic Constants of Potassium Bromide
Monocrystals

77003
SOV/56-37-6-43/55

| T, °C | $S_{11} \times 10^{-13}$ cm ² /dyne | $S'_{11} \times 10^{-13}$ cm ² /dyne | $S_{44} \times 10^{-13}$ cm ² /dyne | $S_{12} \times 10^{-13}$ cm ² /dyne | $\chi \cdot S_{12} \text{ cm}^2/\text{dyne}$ |
|-------|--|---|--|--|--|
| 20 | 30.1 | 62.1 | 105 | -3.4 | 7 |
| 100 | 32.6 | 63.7 | 199 | -4.7 | 7 |
| 200 | 36.1 | 63.8 | 206 | -7.5 | 6 |
| 300 | 40.3 | 68.5 | 213 | -9.8 | 6 |
| 400 | 45.7 | 72.0 | 219 | -11.2 | 7 |
| 500 | 53.5 | 76.3 | 226 | -13.9 | 8 |
| 600 | 63.7 | 82.0 | 234 | -16.7 | 9 |
| 700 | 75.2 | 89.3 | 241 | -17.1 | 12 |
| 730 | 81.3 | 91.0 | 244 | -21.3 | 12 |

The extrapolation of the temperature dependence of $E_{[100]}$, $E_{[110]}$, and $G_{[100]}$ to the temperature of absolute zero gave the following values of elastic constants at $T = 0^\circ\text{K}$: $s_{11} = 24.0 \times 10^{-13}$; $s_{44} = 180 \times 10^{-13}$; $s_{12} = -2.8 \times 10^{-13}$ cm²/dyne. These results accord with the data of J. K. Galt (cf., Phys. Rev.,

Card 2/3

Letter to the Editor. Thermal Relationship
in Elastic Constants of Potassium Bromide
Monocrystals

77003
SOV/56-37-6-43/55

73, 1460, 1941). There is 1 table; and 3 references,
1 Soviet, 2 U.S. The U.S. references are L. Hunter,
S. Siegel, Phys. Rev., 61, 64 (1942); J. K. Galt,
Phys. Rev., 73, 1460, (1941).

ASSOCIATION: Leningrad Phys.-Tech. Inst. Acad. Sciences USSR (Leningradskiy fiziko-tehnicheskiy institut, Akademii nauk SSSR)

SUBMITTED: August 29, 1959

Card 3/3

NIKANOROV, S.P.; STEPANOV, A.V.

Temperature dependence of the elastic constants of potassium iodide single crystals. Fiz.tver.tela 3 no.11:3551-3553 N '61.
(MIRA 14:10)
1. Fiziko-tehnicheskiy institut im. A.F.Ioffe AN SSSR, Leningrad.
(Potassium iodide crystals) (Elasticity)

40892

24.750V,

S/161/62/004/009/030/045
B101/B106AUTHORS: Nikanorov, S. I., and Stepanov, A. V.

TITLE: Temperature dependence of the elasticity constants of potassium chloride and sodium chloride single crystals

PERIODICAL: Fizika tverdogo tela, v. 4, no. 2, 1962, 2576-2584

TEXT: The differential method suggested by I. W. Marx, I. M. Sivertsen (Journ. Appl. Phys., 24, 81, 1953) was used to measure the temperature dependence of alkali halide single crystals. Using this method, a long specimen is heated at one end only, the glued joint between specimen and piezocrystal lying outside the heater. The measured results of the differential method were compared with those obtained by the usual method of the three-part oscillator, and proved to be more accurate. The good agreement of the results obtained for NaCl with the published data (L. Hunter and S. Siegel, Phys. Rev., 61, 84, 1942) further confirmed the dependability of the differential method. The following constants were determined for KCl between 20 and 600°C and for NaF between 20 and 500°C:

$$s_{11} = 1/E_{100}; s'_{11} = 1/E_{110}; s_{44} = 1/G_{100}; s'_{44} = 1/G_{110}; s_{12} = 1/E_{110} - 1/G_{110}$$

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S/181/C2/004/009/030/045
B101/B186

Temperature dependence of the ...

the compressibility $\kappa = \beta(s_{11} + 2s_{12})$, and the factor of elastic anisotropy $A = 2(s_{11} - s_{12})/s_{44}$ were calculated, and the data for 0°K and for the melting point were obtained by extrapolation. Some of these data for KCl are:

| T, °K | s_{11} | s'_{11} | s_{44} | s'_{44} | s_{12} | κ | A |
|-------|--------------------|--------------------|-------------------|-------------------|--------------------|----------|------|
| 0 | 0.201 ₈ | 0.484 ₁ | 1.48 ₁ | 0.97 ₆ | -0.00 ₄ | 0.58 | 0.28 |
| 200 | 0.253 ₁ | 0.503 ₃ | 1.59 ₅ | 1.08 ₀ | -0.037 | 0.537 | 0.36 |
| 373 | 0.353 ₂ | 0.54 ₄ | 0.71 ₅ | 0.23 ₆ | .07 ₃ | .55 | .40 |
| 373 | 0.308 ₁ | 0.64 ₁ | 0.86 ₉ | 0.53 ₁ | .12 ₅ | .77 | .60 |
| 1049 | 0.731 ₅ | 0.74 ₄ | 1.97 ₆ | 1.82 ₅ | -0.16 ₈ | 1.19 | 0.91 |

and for NaF:

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Temperature dependence of the ...

S/181/62/004/009/030/045
B101/B186

| T, °K | s_{11} | s'_{11} | s_{44} | s'_{44} | s_{12} | κ | A |
|-------|--------------------|--------------------|--------------------|-----------|--------------------|----------|------|
| 0 | 0.096 ₇ | 0.121 ₆ | 0.329 ₄ | - | -0.01 ₈ | 0.18 | 0.70 |
| 213 | 0.114 ₅ | 0.135 ₅ | 0.353 ₅ | - | -0.02 ₀ | 0.22 | 0.76 |
| 573 | .137 ₂ | .151 ₄ | .379 ₈ | - | .02 ₄ | .27 | .85 |
| 773 | .157 ₃ | .165 ₄ | .400 ₉ | - | .02 ₇ | .31 | .92 |
| m.p. | | | | | | | |
| 1265 | 0.240 ₆ | 0.214 ₆ | 0.464 ₇ | - | -0.04 ₄ | 0.46 | 1.22 |

There are 4 figures and 3 tables. The most important English-language references are: F. D. Erick, Phys. Rev., 119, 1873, 1960; M. H. Norwood, C. V. Briscoe, Phys. Rev., 112, 45, 1958.

Card 3/4

Temperature dependence of the ...

S/181/62/004/009/030, 04
B101/B186

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. F. Ioffe AN SSSR,
Leningrad (Physicotechnical Institute imeni A. F. Ioffe
AS USSR, Leningrad)

SUBMITTED: May 17, 1962

Card 4/4

S/181/63/005/002/038/051
B102/B186

AUTHORS: Nikanorov, S. P., Tatarchenko, V. A., and Stepanov, A. V.

TITLE: Temperature dependence of the elastic constants of cesium monocrystalline bromide and iodide

PERIODICAL: Fizika tverdogo tela, v. 5, no. 2, 1963, 619 - 626

TEXT: The temperature dependence of high-purity CsI and CsBr monocrystalline samples was measured in the range from room temperature almost up to the melting point using the piezoelectric oscillator method. The samples were cut from (100) plates in the 100 and 110 directions and then annealed at 300°C for 16 hr in some cases for 200 hrs. The length of the samples was such that $l \approx n\lambda/2$, $n = 3-6$. The method of measuring Young's modulus (E_{100} , E_{110}) and the shear modulus (G_{100} , G_{110}) is published in FTT, 4, 2576, 1962. After each single measurement the sample is shortened by $\lambda/2$ and the arithmetic mean of the values measured is taken as final result. For e.g. E_{110} and a long CsBr sample the following was obtained:

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S/181/63/005/002/038/051

B102/B186

Temperature of the elastic ...

 $E_{110} = 2.10$

| | | | | | |
|------|------|------|------|------|---------|
| 2.17 | 2.14 | 2.13 | 2.03 | 2.08 | / / / / |
|------|------|------|------|------|---------|

sample

piezoquartz

$(E_{110})_{\text{mean}} = 2.11$. From the $E(T)$ and $G(T)$ resp., $s(T)$ graphs obtained for a series of samples it can be seen that elastic anisotropy increases with temperature. The exponential rise of $s_{44} = G_{100}^{-1}$ cannot be explained by theory. The mean values of $s_{11} = E_{100}^{-1}$, $s_{12} = E_{110}^{-1} - \frac{1}{2}G_{110}^{-1}$ and s_{44} obtained for CsBr (0.34 , 0.96 and $-0.08 \cdot 10^{-11} \text{ cm}^2/\text{dyne}$) by extrapolating from room temperature to 0°K , are compared with the theoretical values of K. S. Krishnan and S. K. Roy (Proc. Roy. Soc. London, 210, 481, 1952) and experiments at 4.2°K by B. Marshall (Phys. Rev. 121, 72, 1961). Agreement is good, except for s_{44} . There are 5 figures and 2 tables.

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute imeni A. F. Ioffe AS USSR, Leningrad)

Card 2/3

Temperature of the elastic ...

8/181/63/005/002/038/051
B102/B186

SUBMITTED: September 24, 1962

Card 3/3

NIKANOROV, S.P.

Planning and scheduling of the processes for the creation and
management of new industrial objects by means of the MERT
(Program evaluation and review technique) system. Zav.lab. no
3:319-328 '6..
'MIRA 17-4)

ACCESSION NR: AP4041697

S/0181/64/006/007/1987/1995

AUTHORS: Nikanorov, S. P.; Stepanov, A. V.

TITLE: Effect of the temperature on the elastic properties of crystals of alkali-halide compounds

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 1987-1995

TOPIC TAGS: single crystal, crystal anisotropy, alkali halide, elastic modulus, lattice constant

ABSTRACT: Since the laws governing the elastic anisotropy of crystals over a wide temperature range are still unknown, the authors made a systematic analysis of their earlier findings on the temperature variations of the elastic constants of single-crystal alkali-halide compounds. The substances studied were LiF, NaF, NaCl, KCl, KBr, KI, CsBr, and CsI, and the details were reported in several published papers (ZhETF v. 29, 660, 1955 and v. 37, 1814, 1959; FTT

Card: 1/3

ACCESSION NR: AP4041697

v. 3, 2872 and 3551, 1962; v. 4, 570 and 2576, 1962; v. 5, 619, 1963). These results were compared with data obtained by others, both using the same method and other methods, covering different temperature ranges, and satisfactory agreement was obtained. The analysis has shown that the elastic anisotropy of the static lattice at 0°K and its temperature variation are determined primarily by the type of the metallic ion. The existing theory of Leibfried and Hahn (Zs. Phys. 150, 497, 1958) does not explain the experimentally observed facts, and the reasons for the discrepancy are treated in a companion paper (FTT v. 6, 1996, 1964, Accession Nr. AP4041698). Orig. art. has: 4 figures, 5 formulas and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR
(Physicotechnical Institute AN SSSR)

SUBMITTED: 16Jan64

ENCL: 01

SUB CODE: 88

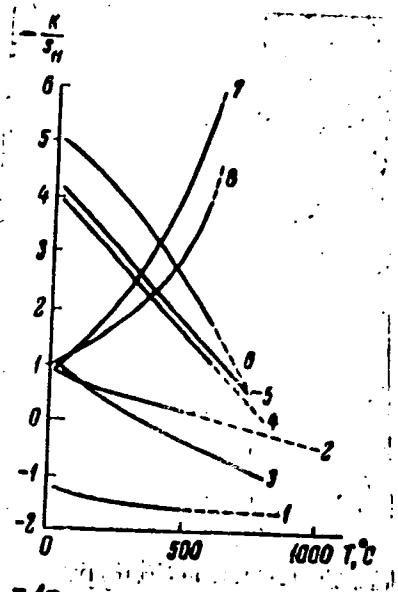
NR REF SOV: 009

OTHER: 018

Card 2/3

ACCESSION NR: AP4041697

ENCLOSURE: 01



Effect of temperature on elastic anisotropy

1 - LiF, 2 - NaF, 3 - NaCl, 4 - KCl,
5 - KBr, 6 - KI, 7 - CsBr, 8 - CsI

Card 3/3

ACCESSION NR: AP4041698

8/0181/64/006/007/1996/2002

AUTHORS: Nikanorov, S. P.; Nran'yan, A. A.; Stepanov, A. V.

TITLE: On the theory of the temperature dependence of the elastic constants of alkali-halide crystals

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 1996-2002

TOPIC TAGS: single crystal, alkali halide, crystal anisotropy, elastic modulus, lattice constant

ABSTRACT: This is a continuation of a series of earlier studies (ZhETF v. 29, 669, 1955 and v. 37, 1814, 1959; FTT v. 3, 2872 and 3551, 1961; v. 4, 570 and 2576, 1962; v. 5, 619, 1963) of the effect of temperature on the elastic constants of single-crystal LiF, NaF, NaCl, KCl, KBr, KI, CsBr, and CsI, from room temperature to nearly the melting point. In this article the results are compared with the theory of Leibfried and Hahn (Zs. Phys. v. 150, 497, 1958) and

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ACCESSION NR: AP4041698

are found to deviate from it. In particular, the theory yields iso-
thermal elastic constants, while the experiments yield adiabatic con-
stants. The difference between these constants increases with in-
creasing temperature, but is comparable with the measurement errors.
Ideas are advanced concerning the causes of the discrepancy. Since
the theory agrees with experiment when the contribution of the oscil-
lation energy to the elastic constants is small, and vice versa, it
is suggested that insufficient account was taken by the authors of
the theory of the temperature dependence of the elastic constants.
"The author thanks Professor A. I. Gubanov for a discussion of sever-
al problems and for valuable remarks." Orig. art. has: 3 figures,
3 formulas, and 2 tables.

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. F. Ioffe AN SSSR
(Physicotechnical Institute AN SSSR)

SUBMITTED: 16Jan64

SUB CODE: 88

NR REF Sov: 007

ENCL: 00

OTHER: 007

Cdr
2/2

NIKANOROV, S.P.; STEPANOV, A.V.

Temperature effect on the elastic properties of crystals of alkali metal halide compounds. Fiz. tver. tela 6 no.7:1984 1995 p. 164.

1. Fiziko-tehnicheskiy institut imeni A.P. Ioffe AN SSSR, Leningrad.
(MIRA DIVISION)

NIKANOV, S. I.; NIKITYAN, A. A., VASIL'YEV, A. A.

Theory of the temperature dependence of the glass transition temperature of alkali metal halides. Phys. Z. Sowjetunion 6, No. 6, p. 152-154.
In: Fiziko-tehnicheskii ogranichenii vlastivostei, t. 1, p. 102-104. Leningrad, 1954.
(Minsk 1951)

L-49047-65 EEC(b)-3/EHT'(1)/EHT'(2)/EXP(b)/T/EXP(c) - FV-4 - IJP(-) - GG/JD/JG

ACCESSION NR: AP5006869

8/0181/65/007/003/0823/0827

AUTHOR: Mitskevich, V. V.; Nikonorov, S. P.

TITLE: Temperature coefficients of moduli of elasticity of alkali-halide crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 3, 1965, 823-827

TOPIC TAGS: alkali halide, single crystal, modulus of elasticity, temperature coefficient

ABSTRACT: The authors apply a theory developed by one of them (Mitskevich, FTT v. 5, 1561, 1963 and v. 6, 3020, 1964) to the experimental results obtained by A. V. Stepanov et al. (ZhETF v. 29, 669, 1955 and v. 37, 1814, 1959; FTT v. 3, 2872 and 3551, 1961; v. 4, 570 and 2576, 1962; v. 5, 619, 1963), who determined the temperature dependence of the elastic constants of single-crystal LiF, NaF, NaCl, KCl, KBr, KI, CsBr, and CsI from room temperature to temperatures close to the melting point. The analysis shows that the temperature coefficients for the shear moduli of all the crystals, calculated in accordance with the theory, are in sufficiently good agreement with the experimental values over a wide range of temperatures. The good agreement confirms the earlier conclusions that the Einstein approximation is

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L 49047-65

ACCESSION NR: AP5006886

3

not suitable for the calculation of the temperature coefficients of the moduli of elasticity; the latter was used by G. Leibfried and H. Hahn (Z. Phys. v. 150, 497, 1958) and has therefore led to results which did not agree with experiment. The agreement between theory and experiment with respect to the temperature coefficients of the shear moduli makes it also possible to explain the variation in the elastic anisotropy of crystals, also investigated by A. V. Stepanov and S. P. Nikanorov (FTT v. 6, 1987, 1964), although a more accurate calculation of the shear moduli of the static lattice at 0°K is necessary for a complete explanation. "The authors thank Professor A. V. Stepanov for interest in the work and valuable remarks." Orig. art. has: 1 figure, 1 formula, and 1 table.

ASSOCIATION: Vil'nyusskiy gosudarstvennyy universitet im. V. Kapcukasa (Vil'nius State University); Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Lenigrad (Physicotechnical Institute AN SSSR)

SUBMITTED: 14 Sep 64

ENCL: 00

SUB CODE: SS,T,D

NR REF Sov: 010

OTHER: 002

Card 2/2

M
PROSELKOV, A.; KOLYCHEV, I.; NIKANOROV, T.; KAGANOVICH, A.

[The use of machines in accounting operations of the State Bank] Mekhanizi-
rovannyi uchet v gosbanke. Moscow, Gosfinizdat, 1952. 306 p.

(MLRA 6:7)

(Banks and banking--Accounting) (Calculating machines)

DATSKIEWICH, Mikhail Frantsevich; ZEMLYANSKIY, Aleksandr Sergeyevich;
KAGANOVICH, Abram Yul'yevich; NIKANOROV, Timofey Mikhaylovich.
Prinimal uchastiye KHOMEKO, P.G.. IVANOV, M.I., red.; KOROTKOVA,
L., red.; TELEGINA, T., tekhn.red.

[Operation of accounting machines in State Bank enterprises]
Zkspluatatsiya schetnykh mashin v uchrezhdeniakh Gosbanka.
Moskva, Gosfinizdat, 1959. 319 p. (MIRA 13:3)
(Accounting machines)

Likandrov, V. . .

"The thermodynamic investigation of the effect of temperature and heat stress." Kirovograd University. Moscow Order of Labor. Order of Tzar Simeon the Great. Order of Steel Medal. Order of the Red Banner of Labor. Candidate of Technical Sciences. Moscow, 1966. (Dissertation for the degree of Candidate of Technical Sciences).

Knizhnaya letopis'
No. 25, 1966, Moscow

NIKANOROV, V.A.

New techniques used in manufacturing gears. Elek. i tepl. tiaga
2 no.8:3-7 Ag '58. (MIRA 11:9)

1. Glavnyy inzhener Perovskogo zavoda po remontu elektropodvizhnogo
sostava.

(Gear cutting)

NIKANOROV, V. A., Lect., Cand. Vet. Sci.
Leningrad Veterinary Inst.
"Epiphysitis in horses."
SO: Veterinaria 24(6), 1947, p. 14.

NIKANOROV, V.A., Lecturer, Cand. of Vet. Sciences
Leningrad Veterinary Institute
"Wash basins and vessels with pedal clutches."
SO: Vet. 24 (7) 1947, p. 44

NIKANOROV, V. A., Lecturer, Cand. of Vet. Sci.
Dept. of General and Special Surgery, Leningrad Vet. Inst.
"Etiology of the ossification of the pulp (hoof) cartilage."
SO: Vet. 25 (8) 1948, p. 31

NIKANOROV, V. A., Cand. of Vet. Sci.
Leningrad Veterinary Institute

"Supply of the periosteum and the capsule of the first phalanx joint
in horse with blood"
SO: Veterinarija 26(10), 1949, p. 39

NIKANOROV, V. A.

V. A. NIKANOROV, author of "Pathogenesis and Treatment of Purulent Inflammation of the Fetlock Joint in Horses," Veterinariya (Veterinary Medicine) Vol. 28, No. 11, November 1951, page 53. (from: NEW BOOKS ON VETERINARY MEDICINE Veterinariya, No. 11, pp. 63,64, Nov. 1951, Moscow, Russian no per.)

SO: Report U-4502; 28 August 1953.

NIKANOROV, V. A., Lead, (and. vet. sci., Leningrad Vet. Inst.)

CHEREDKOV, V. N., NIKANOROV, V. A. AND ZAKHAROV, V. S.: Surgery and orthopedics.
Translation from the Fourth revised and supplemented edition. Kiev.
Agricultural Publishing House, Ukrainian SSR. 1952. 500 pages with illustrations.
Price 11 rubles, 85 kopeks, bound. 10,000 copies. (Textbooks for veterinary
technical schools). In Ukrainian.

SO: Veterinariya; 30; (1); January 1953; Uncl. TABCON

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8

NIKAMOROV, V. A.

"A case of oncocercosis affection of the capsule of the first phalange joint in a horse," (Lecturer, Department of General and Special Surgery). Collected works no. 14, of Leningrad Veterinary Institute USSR Ministry of Agriculture, P 58, Sel'khozgiz, 1954.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8"

NTKANOV, V. A.

5767. Pervaya pomoshch' sel'skokhozyastvennym zhivotnym pri khimicheskikh zabolевaniakh, N-L., Sel'khozgiz, 1954. 1 v. c ill. 205-25.000 rub. 11.12.2.
(55-90) p. 410:614.89

SO: Knizhnaya, Letopis, Vol. 1, 1955

NIKANOV, VASILY ALEKSEYEVICH

NIKANOV, Vasiliy Alekseyevich

NIKANOV, Vasiliy Alekseyevich, Academic Degree of Doctor of Veterinary Sciences, based on his defense, 26 May 1955, in the Council of the Leningrad Veterinary Inst, of his dissertation entitled: "Purulent arthritis of horses." (Clinical morphological research). For the Academic Degree of Doctor of Sciences.

SO: Byulleten' Ministerstva, Vysshego Obrazovaniya SSSR, List No 20, 8 October 1955, Decision of Higher Certification Commission Concerning Academic Degrees and Titles.

SHAKALOV, Karp Iovich, professor, doktor veterinarnykh nauk; POVAZHENKO,
Ivan Yemel'yanovich, professor, zasluzhennyuy deyatel' nauki,
doktor veterinarnykh nauk; MEDVEDEV, Ivan Dmitreyevich, professor,
doktor veterinarnykh nauk; NIKANOROV, Vasiliy Alekseyevich,
dotsent, doktor veterinarnykh nauk; MEDV'KIN, I.Ye., redaktor;
CHUMAYEVA, Z.V., tekhnicheskiy redaktor

[Specialized veterinary surgery] Chastnaia khirurgiia domashnikh
zhivotnykh. Izd. 2-oe, perer. Moskva, Gos. izd-vo selkhoz. lit-ry,
1956. 360 p.
(MLRA 9:8)

1. Kiyevskiy veterinarnyy institut (for Povazhenko) 2. Moskovskaya
veterinarnaya akademiya (for Medvedev) 3. Leningradskiy veterinarnyy
institut (for Shakalov, Nikanorov)
(Veterinary surgery)

SELENITSA, Muslim; LYULI, Metush; NIKANOROV, V.A. (g.Leningrad)

Organization of veterinary medicine in Albania. Veterinariia
36 no.9:83 8 '59.
(MIRA 12:12)

1.Nachal'nik Upravleniya zhivotnovodstva Ministerstva sel'skogo
khozyaystva Albanii (for Selenitsa). 2.Dekan veterinarnogo
fakul'teta Sel'skokhozyaystvennogo instituta Albanii (for Lyuli).
(Albania--Veterinary medicine)

PROTASOV, A.I., dotsent; SINEV, A.V., prof.; SMIRNOV, A.M., dotsent;
BAZHENOV, A.M., dotsent; VIL'NER, A.M., prof.; BASHMURIN, A.F.,
dotsent; SHAKALOV, K.I., prof.; VELLER, A.A., prof.; NIKANOROV,
V.A., prof.; FEDOTOV, V.P., dotsent; KUZNETSOV, G.S., prof.;
BOCHAROV, I.A., prof.; SHCHERBATYKH, P.Ya., prof.; TSION, R.A.,
prof.; ORLBANOVSKAYA, Ye.Ya., dotsent; ADAMANIS, V.F., assistant;
KOLABSKIY, N.A., dotsent; MITSKEVICH, V.Yu., dotsent; GUSEVA, N.V.,
dotsent; MYSHKIN, P.P., dotsent; GUBAREVICH, Ya.G., prof.;
FEDOTOV, B.N., prof.; DOBIN, M.A., dotsent; SIROTKIN, V.A., prof.
[deceased]; KUZ'MIN, V.V., prof.; YEVDOKIMOV, P.D., prof.; POLYAKOV,
A.A., prof.; POLYAKOV, P.Ya., red.; BARANOVA, L.G., tekhn.red.

[Concise handbook for the veterinarian] Kratkii spravochnik veteri-
narnogo vracha. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 624 p.

(MIRA 13:12)

(Veterinary medicine)

NIKANOROV, V. A.

Prav

"About the book 'Disease of hoofs in cattle and hogs.'

Veterinariya, Vol. 37, No. 10, 1960, p. 86

Scanned by
Srinivasan Vet Dept

NIKANOROV, V.A.

At the Perovo Plant. Elek. i tepl. tiaga no.1:32-34 '57.
(MIRA 12:3)

1. Glavnnyy inzhener Perovskogo zavoda imeni L.M. Kaganovicha.
(Perovo--Railroads--Repair shops)

GUTKIN, Lev Vladimirovich; NIKANOROV, Viktor Aleksandrovich; KOFMAN, David Borisovich; OZEMBLOVSKIY, Ch.S., inzh., red.; SIDOROV, N.I., inzh., red.; KHITROV, P.A., tekhn. red.

[Repair of electric rolling stock; mechanical part] Remont elektro-podvizhnogo sostava; mekhanicheskaya chast'. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 347 p. (MIRA 11:7)
(Electric railroads--Rolling stock--Maintenance and repair)

NIVANOROV, V.A.

What the experience of the Perovo Plant indicates. Elek. i templ.
tiaga 2 no.3:19-21 Mr '58. (MIRA 11:4)

1. Glavnnyy inzh. Perovskogo zavoda.
(Perovo--Electric locomotives--Maintenance and repair)

NIKANOROV, V.A., inzh.

New equipment for the repair of electric rolling stock.
Zhel.dor.transp. 41 no.11:19-23 N '59. (MLRA 13:2)

1. Nachal'nik Perovskogo remontnogo zavoda, stantsiya
Perovo.
(Perovo--Railroads--Repair shops)

GUTKIN, Lev Vladimirovich; NIKANOROV, Viktor Aleksandrovich; KOFMAN, David Borisovich; YAKOVLEV, D.V., inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Repair of electric trains; electrical section] Remont elektro-podvizhnogo sostava; elektricheskaya chast'. Moskva, Vses. izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniya, 1960. 331 p. (MIRA 13:11)
(Electric locomotives--Maintenance and repair)

>

GORNOV, Oleg Feodosiyevich, dotsent, kand.tekhn.nauk; MEYENDORF,
Apollinariy Vladimirovich, inzh.; NIKANOV, Viktor Aleksandrovich,
dotsent; SAVCHENKO, Vsevolod Viktorovich, inzh.; SHIBOV,
Arkadiy Dmitriyevich, inzh.; OZEMLOVSKIY, Ch.S., insh., red.;
SIDOROV, M.I., insh., red.; BOBROVA, Ye.N., tekhn.red.

[Operation and repair of the rolling stock of electric railroads]
Eksploatatsiya i remont podvishnogo sostava elektricheskikh
zheleznykh dorog. Moskva, Vses.izdatel'sko-poligr.ob"edinenie"
M-va putei soobshcheniya, 1960. 335 p. (MIRA 14:4)
(Electric railroads--Rolling stock)

NIKANOROV, V.

Friendship of two teams. MTO 2 no.2:54-55 P '60. (MIRA 13:5)

1. Direktor Perovskogo zavoda po remontu elektropodvizhnogo sostava,
Moskovskaya oblast'.
(Perovo--Electric locomotives--Maintenance and repair)

NIKANOROV, V.A.

Some findings regarding the operation of a.c. electric locomotives.
Vest.TSNII MPS 20 no.3:10-13 '61. (MIRA 14:5)

1. Glavnnyy inzhener Glavnogo upravleniya lokomotivnogo khozyaystva
Ministerstva putey soobshcheniya.
(Electric locomotives)

NIKANOROV, V.A.; RAKOV, V.A.

Electric locomotives manufactured by the Czechoslovak "V.I.Lenin"
Plant. Zhel.dor.transp. 43 no.10:89 0 '61. (MIRA 14:9)

1. Glavnnyy inzh. Glavnogo upravleniya lokomotivnogo khozyaystva
Ministerstva putey soobshcheniya (for Nikanorov). 2. Glavnnyy
spetsialist Nauchno-tekhnicheskogo soveta Ministerstva putey
soobshcheniya (for Rakov).

(Czechoslovakia--Electric locomotives)

NIKANOROV, V.A., inzh.; RUKOV, V.A., inzh.

Reorganization of traction on the railroads of Czechoslovakia. Elektro
tepl.tiaga 6 no.1:45-48 Ja '62. (MIRA 15:1)
(Czechoslovakia--Railroads)

KHATSKELEVICH, M.N., inzh.; KLIMOV, N.N., inzh.; NIKANOROV, V.A.

Replies to the inquiries of our readers. Elek. i tepl. tiaga 7
no.4:40 Ap '63. (MIRA 16:5)

1. Glavnnyy inzhener Glavnogo upravleniya lokomotivnogo khozyaystva
Ministerstva putey soobshcheniya (for Nikanorov).
(Railroads--Rolling stock)

BUTS, V.D.; NIKANOROV, V.A.

Replies to the article "Eliminate the lack of personal responsibility in servicing automatic stop devices." Avtom. telem. i sviaz' 8 no.1:42-43 Ja '64. (MIRA 17:3)

1. Zamestitel' nachal'nika Glavnogo upravleniya signalizatsii i svyazi Ministerstva putey soobshcheniya (for Buts). 2. glavnyy inzh. Glavnogo upravleniya Lokomotivnogo knozyaystva Ministerstva putey soobshcheniya (for Nikanorov).

NIKANOROV, V.A.

What type of promising locomotives should be developed for
the future? Zhel. dor. transp. 46 no.1:46-52 Ja '64.

1. Glavnnyy inzh. Glavnogo upravleniya lokomotivnogo khozyaystva
Ministerstva putey soobshcheniya.
(MIRA 17:8)

NIKANOROV, Vasiliy Alekseyevich, prof.; KLZNETSOV, Aleksey Kirillovich, dots.; POLYAKOV, P.Ya., red.

[Veterinary surgery and orthopedia] Veterinarnaia khirurgiia i ortopedia. Leningrad, Kolos, 1965. 483 p.
(MIRA 18:7)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8

NIKANOROV, V.I.

BRONNIKOV, D.M.; NIKANOROV, V.I.

Determination of the limit of sectional mining of narrow ore veins.
Trudy Inst.gor.dela 1:52-58 '54. (MLRA 7:12)
(Ores) (Mining engineering)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001136910020-8"

L 25389-65 E/T(m) IJP(c)

ACCESSION NR: AP5002144

S/0120/64/000/006/0039/0044

AUTHOR: Gromova, I. I.; Legar, F.; Nikanorov, V. I.; Peter, G.;
Pisarev, A. F.

TITLE: Characteristics of a multilayer spark-discharge chamber with various
filling gases

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1964, 39-44

TOPIC TAGS: spark discharge chamber, multilayer spark chamber

ABSTRACT: The results of an experimental investigation of the characteristics of a 27-electrode spark chamber filled with Ne+0.4% A or He or Ne+20% He are reported. The effects of the clearing field, pulse delay, gas pressure, and gas type upon the efficiency of recording charged particles were studied. It was found that the efficiency vs. pulse-delay curves have no gradually falling-off "tails." The curves for Ne+0.4% A and Ne+20% He drop steeply, which fact is favorable

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L 25389-65

ACCESSION NR. AP5002144

for using these gas mixtures in the chambers operating with high background noise. The storage-time vs. clearing-field curves have a minimum at 0.3-0.4 microsec. An increase in the efficiency and storage time with increasing the clearing-field amplitude is most probably due to metastable states of basic-gas atoms which are formed by the drift energy of initial electrons in the clearing field. The spark chambers can operate efficiently at low gas pressures. The plateau length for the above gases is about 7-8 kv. Orig. art. has: 7 figures.

ASSOCIATION: Ob'yedinenyyi institut yadernykh issledovaniy (Joint Nuclear Research Institute)

SUBMITTED: 03 Oct 63

ENCL: 00

SUB CODE: NP

NO REF Sov: 003

OTHER: 002

Card 2/2

NIKANOROV, V. I., inzhener.

Using thermit for secondary ore crushing. Bezop. truda v prom.
1 no. 5:14-16 '57. (MIRA 10:7)
(Mining engineering) (Thermit)

TIRPOGOSSOV, Z.A.; NIKANOROV, V.I.

Effect of lumpiness of irregular size ore on its output. Trudy
Inst. gor. dela 4:29-36 '57. (MIRA 10:6)
(Mining engineering)

NIKANOROV, V.I., Cand Tech Sci -- (diss) "Study of ~~xxxx~~
methods ~~means~~ of repeated ~~granulation~~ ^{crushing} ~~the~~ mining of
thick deposits hard
~~strong formations~~ of ~~xxxxx~~ ores." Mos 1958, 16 pp. (Acad
Sci USSR. Inst of Mining ~~Affairs~~) 150 copies (KL, 32-58, 109)

-- 34 --

NIKANOROV, V.I.

Desintegration of rocks under local heating. Izv.vys.ucheb.
zav.; geol. i razv. 1 no.6:95-108 Je '58. (MIRA 13:2)

1. Institut gornogo dela AN SSSR.
(Rocks--Thermal properties)

NIKANOROV, V. I.

127-48-7-1C/20

AUTHOR: Agoshkov, V.I., Corresponding Member of the AS USSR
Brylov, S.A., Candidate of Technical Sciences, and
Nikanorov, V.I., Mining Engineer

TITLE: Secondary Ore Crushing by a Hydraulic Press (Vtorichnoye
drobleniye rudy gidravlicheskim pressom)

PERIODICAL: Gornyy zhurnal, 1958, Nr 7, pp 55-59 (USSR)

ABSTRACT: The authors describe experiments made by the Institute of
Mining Works of the Geologo-razvedochnyy institut imeni
Ordzhonikidze (The Geological-Prospecting Institute imeni
Ordzhonikidze) on secondary ore crushing with hydraulic presses.
This operation until now was not mechanized. The press was
installed in a mining gallery. It was composed of two hydraulic
cylinders from the CD-300 lifting jack and a high-pressure
oil pump. A buttress composed of girders and forged iron
pieces welded on them, was installed against the wall. Pieces
of rock were placed against the girders and the press. The
experiments showed that secondary crushing by this method
caused less dust, was more rapid and could be regulated by
applying more or less pressure and by using different types
of punches. The method of dropping weights on pieces of rock

Card 1/2

Secondary Ore Crushing by a Hydraulic Press

127-58-7-1C '20

to crush them was also tested, and proved to be less efficient. The authors recommend the introduction of the hydraulic press method into the mining industry.
There are 3 photos, 2 drawings and 4 tables.

ASSOCIATION: Institut gornogo dela AN SSSR (The Mining Institute of the AS USSR)

Card 2/2 1. Ore crushing 2. Hydraulic presses-Applications

AGOSHKOV, M.I.; BRONNIKOV, D.M.; KOVAZHENKOV, A.V. [deceased]; NIKANOROV, V.I.; MOCHALIN, M.P.; VORONYUK, A.S.. Prinimali uchastiye: KRASAVIN, G.A.; GAGULIN, M.V.; BARSUKOV, F.A.. TERPOGOSOV, Z.A., kand. tekhn.nauk, otv.red.; NIKOLAYEVA, I.N., red.izd-va; DOROKHINA, I.N., tekhn.red.

[Investigating the main technological processes of underground mining of thick hard ore deposits] Issledovanie osnovnykh tekhnologicheskikh protsessov pri podzemnoi razrabotke moshchnykh mestorozhdenii krepkikh rud. Moskva, Izd-vo Akad.nauk SSSR, 1959. 359 p.
(MIRA 13:2)

1. Chlen-korrespondent AN SSSR (for Agoshkov).
(Mining engineering) (Ore dressing)

NIKANOV, V.I., gornyy inzh.

Dust formation resulting from explosions and from use of
thermit in secondary crushing at the I.M.Gibkin iron mine.
Bor'ba s sil. 3:01-96 '59. (MIRA 12:9)
(KURSK MAGNETIC ANOMALY--DUST) (THERMIT)

NIKANOROV, V.I.; PETER, G.; PISAREV, A.F.; POZE, Kh.

[Measurement of the spin correlation coefficient C_{kp} for proton-proton scattering at an energy of 660 Mev] Izmerenie koeffitsienta spinovoi korreliatsii C_{kp} dlia (p-p) - ras- seiania pri energii 660 Mev. Dubna, Ob"edinennyi in-t iader- nykh issl., 1961. 8 p. (MIRA 15:1)
(Nuclear spin) (Protons—Scattering)

GOLOVIN, B.M.; ZUL'KARNEYEV, R.Ya.; NIKANOROV, V.I.; SATAROV, V.I.

[Spin-orbital states of particles in elastic nucleon-deuteron scattering] Spinovye sostoyaniia chastits pri uprugom nuklon-deutronnom rasseyaniii. Dubna, Ob"edinennyi in-t iadernykh issledovaniii, 1961. 15 p. (MIRA 15:2)
(Nuclear spin) (Scattering (Physics))

3546

S/120/61/000/006/006/041

E032/E114

21.6000

AUTHORS: Govorov, A. M., Nikonorov, V. I., Peter G.,
Pisarev, A. F., and Pczé Kh.

TITLE: A gas discharge chamber

PERIODICAL: Pribory i tekhnika eksperimenta no. 6 1961 49 -1

TEXT: A brief version of this article was communicated to
the International Conference on High-energy Nuclear Instruments
at Berkeley in September 1960.

The present chamber is similar to those described by S. Fukui and
S. Miyamoto (Ref. 1: Nuovo cimento v. 11 1959, 113) and
S. Fukui, S. Miyamoto (Ref. 2: Physical Institute Nagoya University
Japan Preprint 1959). It differs from ordinary spark chambers
in that the electrodes are separated from the working volume by a
dielectric. The authors have investigated chambers with plane
electrodes (25 x 10 cm²) at a distance of 7 cm. The chambers
were filled with neon to a pressure of 760 mm Hg with an added
argon impurity (0.3-0.45%). In addition to the properties
investigated in Refs. 1 and 2 the present authors have studied

Card 1/4 Z X

A gas discharge chamber

30149
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E032/E114

the dependence of the amplitude of the high voltage pulse applied to the chamber on its length (for visible tracks) and magnitude of the clearing field. It was found that when the argon impurity is 0.4-0.45% and the electric field is ± 4 kV/cm the maximum angle at which the discharge will always occur along the track of the particles is 30° . At larger angles both normal and distorted tracks are observed. Examination of photographs of tracks at 30° showed that there was a systematic displacement towards the positive electrode by about 1 mm relative to the direction of motion of the particle. Acknowledgments are expressed to A A Tyapkin and V I Salatskii for discussions. There are 4 figures and 2 non Soviet bloc references. The English language reference 'Ref. 2' is as quoted in text above.

ASSOCIATION. Ob'yedinennyy institut vysokochastotovaniya
(Joint Institute for High Frequency)

SUBMITTED. April 10 1961

Card 2/4

GOLOVIN, B.M.; ZUL'KARNEYEV, R.Ya.; NIKANOROV, V.I.; SATAROV, V.I.;
SARANTSEVA, V.R., tekhn. red.

[On the reduction of NN-scattering amplitudes in T=0 states]
O vosstanovlenii amplitudy NN -rasseiania v sostoianijakh
T = 0. Dubna, Ob"edinenyi in-t iadernykh issledovanii, 1962. 8 p.
(MIRA 15:12)
(Nucleons--Scattering)

NIKANOROV, V. I., PETER, G., PISAREV, A. F., POSE, H.

"Measurement of the Spin Correlation Coefficient C_{kp} for pp-Scattering
at 660 Mev $\bar{\chi}$)"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Institute for Nuclear Research
Laboratory of Nuclear Problems

2024600

S/056/62/042/005/010/050
B104/B102AUTHORS: Nikanorov, V. I., Peter, G., Pisarev, A. F., Poze, Kh.

TITLE: Measurement of the spin correlation coefficient for pp-scattering at 660 Mev

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,
no. 5, 1962, 1209-1211

TEXT: The spin correlation coefficient C_{kp} was measured for elastic proton-proton scattering at an angle of 90° , the 660-Mev protons being scattered on a polyethylene target (Fig. 1). The scattered protons and the recoil protons were recorded by coincidences in the telescopes T_1 and T_2 . The solid angle of the two telescopes was $0.7 \cdot 10^{-3}$ steradion. The amplitude of elastic pp-scattering can be represented in the form

$$M = \alpha + \beta (\sigma_1 n) (\sigma_2 n) + \gamma (\sigma_1 - \sigma_2) n + \delta (\sigma_1 K) (\sigma_2 K) + \epsilon (\sigma_1 P) (\sigma_2 P) \quad (1).$$

C_{kp} and the scattering amplitude coefficients are related by

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Measurement of the spin correlation ...

$I_0(\theta)C_{kp}(\theta) = -\text{Im}(de^*)$, where $d = c - \epsilon$, $\epsilon = 2\gamma$, and $I_0(\theta)$ is the differential cross section of elastic pp-scattering (cf. Oehme, Phys. Rev. 98, 147, 1955). The proton spin states after scattering were determined with the aid of two identical carbon targets. The telescope T_3 and T_4 were in anticoincidence with the telescopes T_1 and T_2 . The direction of motion of the protons before and after scattering from carbon targets was determined with gas discharge chambers. Results: The correlation asymmetry factor is 0.054 ± 0.041 , $C_{kp}(90^\circ) = 0.22 \pm 0.18$. This work is part of an experimental program for determining the scattering amplitudes and for conducting a phase shift analysis. There are 2 figures.

ASSOCIATION: Ob'yedinenyyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: December 29, 1961

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AUTHOR: Nikonorov, V. I.TITLE: The elastic high energy πN scattering 19PERIODICAL: Zhurnal eksperimental'noy i tekhnicheskoy fiziki, v. 44, no. 3,
1963, 1124-1125

TEXT: From the study of the analytic properties of scattering amplitudes V. N. Gribov and I. Ya. Pomeranchuk (Ref. 1: ZhETF, 42, 1141, 1962; Ref. 2: ZhETF, 42, 1682, 1962) and G. Domokosh (Ref. 3: Preprint OIYAL, D-922, 1962) established a connection between the interaction cross section of high energy particles, in particular between the elastic scattering cross sections

$$(d\sigma/d\Omega)_{\pi N}^{\text{el}} = (d\sigma/d\Omega)_{\pi\pi} (d\sigma/d\Omega)_{NN}. \quad (1)$$

If the πN and NN cross sections are measured at different energies, the obvious modification of (1) leads to equation

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The elastic high energy...

$$(s_{nn} s_{NN} / s_{eN}^2)^{\alpha(t)-1} \left(\frac{ds}{dt} \right)_{eN}^2 = \\ = \left(\frac{ds}{dt} \right)_{nn} \left(\frac{ds}{dt} \right)_{NN}. \quad (2)$$

where s is the square of the total center of mass energy of the corresponding process, and $\alpha(t)$ is the Pomeranchuk pole trajectory. The author presents the differential cross sections of the elastic $\pi\bar{\pi}$ scattering for $s_{\pi\bar{\pi}}$ equal to 2.0 and 14.4 Bev^2 . The $s_{\pi\bar{\pi}} = 2.0 \text{ Bev}^2$ scattering turns out to be almost isotropic while the other is not. Using the optical theorem the author obtains $\approx 15 \text{ mbm}$ for the total $\pi\bar{\pi}$ cross section in agreement with the estimate in Ref. 1. There is 1 figure.

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